

DERWENT-ACC-NO: 2005-066342.

DERWENT-WEEK: 200507

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TITLE: Light emitting element for active matrix type display device, has light emission layer containing metal oxide n-type semiconductor fine powder holding luminescent organic material, that is inserted between respective electrodes

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PRIORITY-DATA: 2003JP-0300003 (August 25, 2003) , 2003JP-0170086 (June 13, 2003) , 2003JP-0290413 (August 8, 2003)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 2004112440 A1	December 23, 2004	N/A	123	H05B 033/14

DESIGNATED-STATES: AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU

CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO

RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW AT BE

BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NA

NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
WO2004112440A1	N/A	2004WO-JP08475	June 10, 2004

INT-CL (IPC): H05B033/02, H05B033/10 , H05B033/14 , H05B033/26

ABSTRACTED-PUB-NO: WO2004112440A

BASIC-ABSTRACT:

NOVELTY - A light emission layer (6) containing the metal oxide n-type semiconductor fine powder (4), is inserted between the electrodes (2,7) that

are arranged on respective substrates (1,8). The luminescent organic material (5) is held on each semiconductor fine powder in the light emission layer by chemical adsorption.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

- (1) display device; and
- (2) manufacturing method of light emitting element.

USE - For display devices (claimed) such as active matrix type display device.

ADVANTAGE - The contact area of the organic material with fine powder is increased, thus the light emission is increased effectively and the brightness is improved reliably.

DESCRIPTION OF DRAWING(S) - The figure shows a sectional view of the light emitting element.

substrates 1,8

electrodes 2,7

fine powder 4

organic material 5

light emission layer 6

CHOSEN-DRAWING: Dwg.1/43

TITLE-TERMS: LIGHT EMIT ELEMENT ACTIVE MATRIX TYPE DISPLAY DEVICE LIGHT
EMIT

LAYER CONTAIN METAL OXIDE N TYPE SEMICONDUCTOR FINE POWDER
HOLD
LUMINESCENT ORGANIC MATERIAL INSERT RESPECTIVE ELECTRODE

DERWENT-CLASS: U14

EPI-CODES: U14-J02D2;

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N2005-057411

